Request to Archive
With The National Centers for Environmental Information
For Sea surface temperature and salinity data from thermosalinographs collected aboard multiple ships world-wide from 1989-present as part of the Global Ocean Surface Underway Data (GOSUD) project
Provided by GOSUD/IODE

2016-08-02

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

FR/IFREMER/CORIOLIS > CORIOLIS Data Service, French Research Institute for Exploitation of the Sea, France

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The GOSUD thermosalinographs dataset being submitted to NOAA/NCEI contain information about sea surface temperature and salinity obtained with the use of thermosalinographs (TSG) installed in a variety of ships (237 ships). The datasets provided by the various GOSUD contributors are collected and assembled in the database by Coriolis. The data set submitted to NCEI for distribution constitutes the complete data set assembled by GOSUD with the corresponding flags after the quality control. The time period covered by the Data set is from 1989 to present. The geospatial coverage of the Data set is worldwide coverage. The observations are collected from different categories of platforms such as research vessels, merchant ships but also sailing ships or cruise vessels. The measured variables or parameters include conductivity, sea surface salinity, sea surface water temperature (using internal sensor), water temperature (using external sensor, when available), latitude, longitude and time. The originator's data have different temporal resolutions from three minute median filtered values to one hour point values.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1989-07-20
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

GOSUD version 2 and version 3

6. Approximate date when the dataset was or will be released to the public:

2000

7. Who are the expected users of the archived data? How will the archived data be used?

The expected users are NOAA/NCEI, NOAA/STAR and satellite community. This dataset will be an important component of the NCEI TSG database developing now , which will be a critical in situ database for the in situ/satellite

matchup project in NOAA/STAR. Ocean surface is the location of strong exchanges with the atmosphere but also with ice and continents. Ship based underway measurements can make a significant contribution to the observation of this very active layer. This data is also used for research purposes as part of the GOOS.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

This dataset has been developed for years and used by oceanographers fore research and applications. Tim Boyer is in the project steering committee. Steve Rutz and Christopher Paver have been involved in this project several years ago. This dataset has been also assessed in the frame of the CMEMS Copernicus Marine Service funded by the EU.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

NCEI has automatons for archiving the GOSUD version 1 dataset. The GOSUD has stopped updating and maintaining version 1 from 2005. GOSUD released version 2 and version 3. Version 2 contains both historical and recent data from 1989 to present. Version 3 contains recent data with enhanced metadata.

10. List the input datasets and ancillary information used to produce the data.

Data sources that used to produce the dataset include
- TSG data collected on board french Research vessels (real-time and further processing in delayed mode)
- TSG data collected on board Ships of Opportunity network led by French Research Institute IRD : (real-time and further processing in delayed mode)
- pinpoint contribution from sailing ships (network led at French level Oceanoscientic and Ifremer). Few real time transmission but delayed mode processing
- TSG data collected on board RV from NOAA (real time)
No further processing in delayed mode for those vessels
- TSG data collected on board various vessels (real time). poor metadata and data circulating through the GTS

11. List web pages and other links that provide information on the data.

http://www.gosud.org/ official GOSUD website
ftp://ftp.ifremer.fr/ifremer/gosudv3/ ftp site to download the version 3 data
ftp://ftp.ifremer.fr/ifremer/gosudv2/ ftp site to download the version 2 data

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. The files are in netcdf format. The files are self-explaining and contain collection level data and metadata such as platform information, contact information, instrument information, metadata for each variables and QC flags.

13. Indicate the data file format(s).

1. netCDF-4

14. Are the data files compressed?

gzip

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

The files are named as callsign_YYYY_MM_RT (NRT)_Gosud_V#.nc.gz
callsign is the specific call sign of the vessel

YYYY: four digital year
MM: two digital month
RT: real-time (NRT: near real-time)
V#: version number, either 2 or 3
Both version 2 and version 3 data are available at ftp://ftp.ifremer.fr/ifremer/.
Version 2 data is all saved in one folder. Version 3 data is organized by callsign.

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

The sample data files can be access at ftp://ftp.ifremer.fr/ifremer/gosudv2/latest/ for version 2 data and ftp://ftp.ifremer.fr/ifremer/gosudv3/latest/ for version 3 data

A list of files for GOSUD version 3 data can be found at ftp://ftp.ifremer.fr/ifremer/gosudv3/gosud_index.txt

A list of files for GOSUD version 3 data can be found at ftp://ftp.ifremer.fr/ifremer/gosudv2/gosud_index.txt

Md5 information for each file can be found at ftp://ftp.ifremer.fr/ifremer/gosudv2/latest_md5/ for version 2 and ftp://ftp.ifremer.fr/ifremer/gosudv3/latest_md5/ for version 3

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume:	5GB
Number of Data Files:	9000

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate:	10MB per Day
Data File Frequency:	10 per Day
Data Production Start:	1989-07-20

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

The data set is updated in a daily basis, with the new data available to the Producer

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	France
System Name:	Global Ocean Surface Underway Data (GOSUD)
System Owner:	Loic Petit de la Villeon & Fabienne Gaillard
Additional Information:	Global Ocean Surface Underway Data (GOSUD) is an initiative of the International Oceanographic Data and Information Exchange (IODE) of the Intergovernmental Oceanographic Commission (IOC) programme

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download
2. Direct download links
3. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?
No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.
The GOSUD TSG data will be a major component of the NCEI TSG database

24. Are the data archived at another facility or are there plans to do so? Please explain.
No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?
NCEI (formerly NODC) has automation of archiving GOSUD version 1 data. This need to be updated as version 2 and 3 are available now and version 1 is no longer maintained. Zhankun Wang is the NCEI primary contact person.

26. Do you have a data management plan for your data?
The data is managed by the GOSUD team in France. GOSUD team maintains a web site and a ftp site to manage and distribute the dataset.

27. Have funds been allocated to archive the data at NCEI?
No

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.
The Global Ocean Surface Underway Data (GOSUD) Project is an Intergovernmental Oceanographic Commission (IOC) programme designed as an end to end system for data collected by ships as they traverse their ocean tracks. The goal of the GOSUD Project is to develop and implement the data system for ocean surface data, to acquire and manage these data and to provide a mechanism to integrate these data with other types of data collected in the world oceans.

29. Is there a desired deadline for NCEI to archive and provide access to the data?
Archive by:
Accessible by: 2016-09-01

30. Add any other pertinent information for this request.
None